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Compliance & Environmental Justice

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November 11, 2006

SENT BY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

**CONSENT DECREE
CIVIL ACTION NO. CV 98-3-H-CCL
EAST HELENA SITE
WORK PERFORMED IN OCTOBER 2006
PROGRESS REPORT #103**

Dear Ms. Jacobson:

On May 5, 1998, Asarco and the United States Environmental Protection Agency (EPA) entered into a Consent Decree (Decree) to further the objectives of the Resource Conservation and Recovery Act (RCRA) and the Clean Water Act (CWA). Section XI of the Decree (Reporting: Corrective Action) requires Asarco to submit certified monthly progress reports to EPA which discuss the actions taken by Asarco in achieving compliance with the Decree. The reports are to be submitted to EPA no later than the twentieth (20th) day of the following month. The following describes only those activities that have occurred or are related to projects performed during October 2006, with the exception of the November 1, 2006 public meeting, the analytical data received in early November 2006, and the construction of the slurry wall in the former acid plant sediment drying area. The historical actions taken by Asarco in achieving compliance with the Decree are contained in previous monthly progress reports.

a. Describe the actions, progress, and status of projects which have been undertaken pursuant to Part VII of the Decree;

In an October 23, 2006 letter, EPA acknowledged that storage of hazardous wastes in structures, which meet the substantive requirement contained in 40 CFR Subpart DD, Containment Building Requirements, beyond 90 days is allowed to facilitate appropriate assessment and installation of site remedial measures. The Montana Consent Decree (CDV-2004-212) provides language that expressly waives the storage and permitting requirements under 40 CFR Part 262.34 (a) and 40 CFR Part 262.34 (b) for materials that are being addressed under Asarco's annual Work Plans.

During the period of September 30, 2006 through October 31, 2006 autonomous data collection continued on the PRB pilot scale site using boreholes instrumented during the previous month. In collaboration with the Idaho National Laboratory (INL), the data are automatically uploaded and analyzed on a server at Idaho Falls, Idaho. Difficulties were encountered with the wireless Internet link, which required short visits, by INL technicians. However, data collections continued throughout the month although data uploads were interrupted. Analyses of the data show long-term changes in the barrier electrical conductivity. Preliminary results indicate that the lower portion of the barrier shows substantially higher resistivity than observed at other, older barriers. Work is underway to understand how this relates to barrier performance.

The RCRA Consent Decree annual public meeting took place on November 1, 2006 at 7:00 pm at the East Helena Volunteer Firehall. In accordance with Section IX of the Decree (Community Relations at East Helena), notices that announced the annual public meeting were published on October 22, 2006 and October 29, 2006 in the Sunday editions of the Helena Independent Record. An affidavit of publication is attached to this monthly progress report. More than 150 letters, announcing the public meeting, were mailed to interested parties. During the meeting, EPA CERCLA program and Lewis and Clark County Health Department personnel presented an update on East Helena related projects. On November 2, 2006, Jon Nickel sent to Linda Jacobson (via electronic mail) a contact list of East Helena area citizens who have expressed an interest in Asarco-related RCRA Consent Decree projects.

During the week of October 30, 2006 through November 2, 2006, Linda Jacobson (EPA, Region VIII, Denver Office) inspected the RCRA Consent Decree related projects at the East Helena Plant. The purpose of this visit was to 1) prepare for the November 1, 2006 public meeting, 2) view the slurry wall construction in the former acid plant sediment drying area, 3) meet with Montana Department of Environmental Quality, Energy Laboratory, and Tetra Tech EM, Incorporated personnel to resolve split analytical sample result discrepancies, 4) examine the fumed slag that will be used as backfill material for the interim and final capping projects, and 5) record the cleaning and demolition status of the former zinc plant and sinter plant.

2006 Interim Measures Work Plan Addendum

On September 26, 2006, Asarco submitted the 2006 Interim Measures Work Plan Addendum, which 1) describes the final cleaning actions designed to attain the objectives of the Montana Consent Decree, 2) identifies the locations for collection of surface samples where soils have been exposed during cleaning and demolition activities, 3) outlines the areas in which backfilling using fumed slag will be required to achieve proper site stabilization and drainage, 4) presents the locations that will require interim capping, 5) provides the interim capping techniques, procedures, and materials that will be used to inhibit infiltration of precipitation within the demolition areas, and 6) outlines the general, short-term

maintenance for the interim cap. On October 13, 2006, EPA transmitted to Asarco comments relating to the Work Plan. On October 16, 2006, Asarco responded to the comments with an addendum, which was incorporated into the Work Plan. On October 18, 2006, EPA approved the Work Plan, as amended by Asarco's October 16, 2006 responses.

The Work Plan requires identification and collection of soil samples within demolition footprints that contain exposed soils. On October 5, 2006, Hydrometrics collected surface soil samples from exposed soil areas in the footprint of the former sinter plant. A total of five surface soil samples were collected from each area and composited into one representative sample of the area. Photographs were obtained of each exposed area and a brief description of the soil was recorded in the field book. The samples were submitted to Energy Laboratories on October 10, 2006 for analyses of total metals and SPLP Extractable Metals. The metal analyzed included arsenic, cadmium, copper, lead, and zinc. The laboratory analytical report from Energy Laboratories, photographs, lithological description, and GPS locations for each of the eight exposed soil sample locations are attached to this monthly progress report.

On November 2, 2006, Asarco conducted a pre-bid conference and site tour of the sinter plant and former acid plant sediment drying area for the purpose of inviting prospective contractors an opportunity to bid on the temporary cap project in both of these areas. Asarco received the bid submittals on November 9, 2006 and will awarded the project by mid November 2006. The project is scheduled to begin on November 15, 2006 with a completion date scheduled for December 15, 2006.

Groundwater Remedial Evaluation

In early October 2006, Asarco submitted several documents relating to the design and construction of a slurry wall in the former acid plant sediment drying area. These documents included a 1) Design Basis Memorandum, 2) Draft Work Plan, and 3) Construction Quality Control Plan. On October 13, 2006, EPA approval of the Work Plan for the former acid plant sediment drying area slurry wall installation.

On October 18, 2006, Asarco submitted to EPA the 2006 Interim Measures Work Plan Addendum, Former Acid Plant Sediment Drying Area Slurry Wall, Monitoring, Operation, and Maintenance Work Plan. This Work Plan describes the program for monitoring the effectiveness of the slurry wall and cap following construction activities within the former acid plant sediment drying area, including the testing and sampling program and operational and maintenance procedures. On October 23, 2006, EPA approved the Work Plan, as submitted.

The conceptual work plan for installation of the former acid plant sediment drying area slurry wall was released by EPA for public review and comment on September 19, 2006. The public comment period ended on October 20, 2006. On October 26, 2006, EPA approved the proposal and related supplemental submittals provided by Asarco for the construction of the slurry wall.

On October 17, 2006, Shaw Environmental, Inc. (Shaw) mobilized at the former acid plant sediment drying area to begin construction of the slurry wall. On October 18, 2006, Shaw notified EPA and the Montana Department of Environmental Quality (by electronic mail) that the initial site survey meeting was scheduled to take place on Monday, October 23, 2006 to gain familiarity with the site and to review layout of the construction activities. The site preparation, backfill mixing, and slurry wall installation took place between October 18, 2006 and November 7, 2006. The slurry wall construction concluded on November 11, 2006 with the demobilization of the construction crew and equipment. Shaw will begin preparation of the final construction report, which is scheduled for submittal in January 2007.

Groundwater Drilling Program

The 2006 supplemental monitoring well and borehole drilling program was completed in July, August, and September 2006. Supplemental monitoring wells and boreholes were completed in the former acid plant sediment drying area, speiss/dross area, proposed PRB wall area, and proposed CAMU Phase 2 cell area. On October 10, 2006, the boreholes split soils samples were shipped to Rick Wilkin (EPA Office of Research and Development, R.S. Kerr Laboratory) located in Ada, Oklahoma.

Pump and Treat Pilot Test

In February 2006, Asarco advised EPA that it had retained Camp Dresser and McKee Incorporated (CDM) and Hydrometrics to perform an independent evaluation of pump and treat technology for treatment of groundwater at the East Helena Plant site. Over the last several months, Asarco has reported on the progress of the pump and treat evaluation in the monthly progress reports. CDM has concluded the pump and treat technology evaluation, including the bench-scale study for treatment of speiss water in the on-site High Density Sludge (HDS) water treatment plant. CDM has concluded that the pilot test was not completely successful for proving pump and treat technology as an economic approach to remediation of the speiss area groundwater at the East Helena site. However, the pilot test was successful in demonstrating that the HDS water treatment plant can be used to treat a limited amount of speiss area groundwater that would be produced following installation of slurry walls for groundwater source control at the site. The November 7, 2006 Final Report of Results of the East Helena Pump and Treat Pilot Test is attached to this monthly progress report.

Corrective Action Management Unit (CAMU)

The analysis of soil data and design of the CAMU Phase 2 Cell continued through the month of October 2006. The CAMU design includes a compacted clay liner (CCL) that will be constructed from 3-foot-thick layer of low-permeability borrow obtained from site excavation. The results were obtained from permeability tests run on three bulk samples compacted to 95% of maximum standard Proctor density and placed under a confining stress equal to the overburden load that will be placed on the liner by construction of the CAMU

Phase 2 Cell. These tests confirmed the conclusions, reached in the October 16, 2006 Geotechnical Investigation Report, that site soils can be compacted to achieve hydraulic conductivities of 10^{-7} centimeters per second (cm/sec). A copy of the CAMU Phase 2 Cell Geotechnical Investigation is attached to this monthly progress report. The design of the CAMU Phase 2 cell, having a capacity of approximately 100,000 cubic yards, will continue through November 2006.

RI/FS Long-Term Monitoring Program

In September 2006, Asarco completed the bi-monthly residential groundwater well sampling outlined in Asarco's on-going Post Remedial Investigation (RI)/Feasibility Study (FS), Long Term Monitoring Program. The analytical results obtained from the Jensen drinking groundwater well and Jones' irrigation groundwater well were near the laboratory detection limit of 0.002 mg/L and slightly more than half of the Maximum Contaminant Level (MCL) for arsenic, respectively. On October 5, 2006, the results of this sampling effort were communicated to EPA. Based on the low, but detectable dissolved total arsenic readings obtained from these two groundwater wells, an increase in sample monitoring frequency and an expansion of the parameters, as presented in the Updated Monitoring Program - October 2006, were agreed upon.

On October 23, 2006, Asarco initiated the Updated Monitoring Program - October 2006. Under this program, the Nordstrom and Jones' irrigation groundwater wells and the Corbett and Jensen residential groundwater drinking water wells were scheduled to be sampled. The two irrigation wells located at the Nordstrom and Jones' homes were winterized and could not be sampled during October 2006. Groundwater well samples were obtained from the Corbett and Jensen drinking groundwater wells after 10 minutes of purging, and then again after 30 minutes of purging. The analytical dissolved arsenic result obtained from the Corbett and Jensen groundwater wells are summarized in the following table and are attached to this monthly progress report.

Location	Total Dissolved Arsenic
<i>Corbett - 203 Gail Street</i>	
- 10 Minute Purge	< 2 ppb
- 30 Minute Purge	< 2 ppb
- 30 Minute Purge (Duplicate)	< 2 ppb
<i>Jensen - 401 Gail Street</i>	
- 10 Minute Purge	2 ppb
- 30 Minute Purge	3 ppb
<i>Jones - 301 Gail Street</i>	Not Sampled
<i>Nordstrom - 109 Gail Street</i>	Not Sampled

During September 2006 (September 21, 2006 through September 25, 2006) Asarco collected groundwater monitoring well samples from select EH-100 series monitoring wells. The groundwater monitoring well samples collected from these sites were submitted to Energy Laboratory for common ions, dissolved metals,

and arsenic speciation analyses. The laboratory analytical reports obtained from the September 2006 sampling effort are attached to this monthly progress report.

On behalf of Montana Department of Environmental Quality, Tetra Tech EM Inc. provided oversight during the sampling of wells and obtained split sample from monitoring wells EH-106, EH-111, EH-112, EH-113, EH-114, EH-115, EH-116, and EH-117. On November 2, 2006, Asarco, EPA, Montana Department of Environmental Quality, Energy Laboratory, and Tetra Tech EM Inc. personnel met to discuss the Northern Analytical Laboratories, Inc. split analytical sample results obtained from the September 2006 sampling effort. Based on these discussions, the following actions will take place. First, the Northern Analytical Laboratories, Inc. results obtained from the three monitoring well samples that were improperly preserved with sulfuric acid (EH-114, EH-116, and EH-117) will be removed from the database. Second, the Montana Department of Environmental Quality (through the use of Northern Analytical Laboratories, Inc.) will re-analyze the samples obtained from monitoring wells EH-112 and EH-113. These monitoring wells samples were properly preserved and will be re-analyzed following established and accepted protocols and procedures, including minimal handling and non-digestion of the samples prior to analyses. Finally, a select number of monitoring well samples collected near the leading edge of the paleochannel plume (sampled as part of the November 2006 RI/FS long-term monitoring program) will be split between Asarco and the EPA. Energy Laboratory, Inc. and EPA's Denver laboratory will analyze the samples.

A summary of the correspondence transmitted as part of the East Helena Consent Decree in October 2006 and early November 2006 is included in Attachment 1.

- b. Identify any requirements under the Part VII of the Decree that were not completed in a timely manner, and problems or anticipated problem areas affecting compliance with the Decree;**

There were no requirements that were not completed in a timely manner nor were there problems or anticipated problem areas that affect compliance with the Decree.

- c. Describe projects completed during the prior month, as well as activities scheduled for the next month;**

In accordance with the March 2000 Groundwater Source Control Interim Measures Design Analysis, Plans, and Specification report, the speiss handling area and the former acid plant sediment drying area are being inspected monthly with the last inspection occurring on October 3, 2006. This monthly inspection documented the condition of the interim measures within these two areas.

Under previously approved Work Plans, Asarco has initiated 1) demolition of the concrete retaining walls and pads in the speiss handling area and 2) construction of the slurry wall in the former acid plant sediment drying area. Both of these

construction projects have rendered the areas inaccessible and have negated the need for monthly pad integrity inspections. Beginning December 2006, Asarco proposes to replace the monthly inspections set forth in the March 2000 Groundwater Source Control Interim Measures Design Analysis, Plans, and Specification report with the monthly interim cap inspections outlined in the 1) 2006 Interim Measures Work Plan Addendum, Final Cleaning, Soil Sampling, Backfilling, and Interim Cap Work Plan and 2) 2006 Interim Measures Work Plan Addendum, Former Acid Plant Sediment Drying Area Slurry Wall, Monitoring, Operation, and Maintenance Work Plan.

CAMU Landfill - The construction of the CAMU Phase 1 Cell landfill is complete. The Final Construction Report for the CAMU Phase 1 Cell was hand-delivered to EPA on January 23, 2002. In accordance with the July 2000 CAMU Design Analysis Report (Operation and Maintenance Plan), the CAMU is being inspected monthly with the last inspection occurring on October 9, 2006. This monthly inspection documented the condition of the CAMU.

During November 2006, Asarco is scheduled to conduct the monthly sampling of the four designated residential groundwater wells and semi-annual sampling of groundwater monitoring wells as prescribed in Asarco's revised on-going Post Remedial Investigation (RI)/Feasibility Study (FS), Long Term Monitoring Program. Asarco will split with EPA a select number of monitoring well samples collected near the leading edge of the paleochannel plume (sampled as part of the November 2006 RI/FS long-term monitoring program) for analyses by the EPA's Denver laboratory. Shaw will begin preparation of the Former Acid Plant Sediment Drying Area, Slurry Wall Final Construction Report, which is scheduled for submittal in January 2007.

d. Describe and estimate the percentage of studies completed;

The Pump and Treat Pilot Scale Testing for Source Area Reduction of Groundwater Contamination is approximately 100% complete.

The slurry wall construction in the former acid plant sediment drying area is approximately 90% complete.

e. Describe and summarize all findings to date;

The details of past findings through September 2006 are described and summarized in previous monthly progress reports.

f. Describe actions being taken to address problems;

There were no actions taken to address problems associated with the Decree.

g. Identify changes in key personnel during the period;

Asarco continues to use the services of Asarco technical personnel and Hydrometrics Incorporated to perform the various activities required under the Consent Decree. The Consent Decree activities will continue to be administrated under the direction of Robert Miller.

- h. Include copies of the results of sampling and tests conducted and other data generated pursuant to work performed under Part VII of the Decree since the last Progress Report. Asarco may submit data that has been validated and confirmed by Asarco to supplement any prior submitted data. Updated validated and confirmed data shall be included with the RFI Report, if not delivered before;**

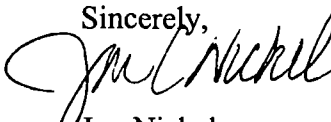
The Energy Laboratory raw analytical sample results obtained from the October 2006 Post Remedial Investigation (RI)/Feasibility Study (FS), Long Term Monitoring Program (Monthly Residential Groundwater Wells) are attached to this monthly progress report. This data is currently being validated and the data validation report will be submitted once completed.

Four updated plume maps that illustrate the Fall 2005 and Spring 2006 groundwater arsenic concentration have been attached to this monthly progress report.

One validation package, entitled "Validation Summary, Asarco East Helena, Post RI/FS Long-Term Monitoring Project, Surface water, Groundwater, and CAMU Wells, Semi-Annual Sampling Event, Inorganic Analyses, June 2006 (confirmation sampling)" is attached to this progress report.

- i. Describe the status of financial assurance mechanisms, including whether any changes have occurred, or are expected to occur which might affect them, and the status of efforts to bring such mechanisms back into compliance with the requirements of this Decree.**

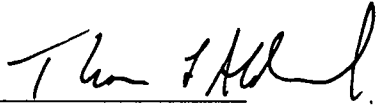
ASARCO filed a voluntary petition for relief under chapter 11 of Title 11 of the United States Bankruptcy Code in the Southern District of Texas on August 9, 2005. ASARCO hopes to use its chapter 11 bankruptcy proceeding to improve its financial position to the point where it can successfully reorganize and immerge from bankruptcy. ASARCO further hopes that at that time it will be in a position to make the required financial assurance demonstration.

Sincerely,

Jon Nickel

Cc: Denise A. Kirkpatrick, MDEQ

CERTIFICATION
PURSUANT TO U.S. v ASARCO INCORPORATED
(CV-98-3-H-CCL, USDC, D. Montana)

I certify under penalty of law that this document, October 2006 Progress Report and all attachments, were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Signature 
Name: Thomas L. Aldrich
Title: Vice President Environmental Affairs
Date: November 10, 2006

CONSENT DECREE
EAST HELENA SITE
OCTOBER 2006 PROGRESS REPORT

SUMMARY OF CORRESPONDENCE
ATTACHMENT 1

DATE OF TRANSMITTAL	CORRESPONDENCE SENT FROM	CORRESPONDENCE SENT TO	SUBJECT	RESPONSE
Attached to This Monthly Progress Report	Jon Nickel	Linda Jacobson	Affidavit of Publication - RCRA Annual Public Meeting	No Formal Response Required
October 16, 2006	Jon Nickel	Linda Jacobson	2006 Interim Measures Work Plan Addendum, Comment Responses	EPA Approval, October 18, 2006
Attached to This Monthly Progress Report	Jon Nickel	Linda Jacobson	Raw Analytical Report, Photographs, Lithology, and GPS Locations (Eight Sinter Plant Soil Sample Locations)	No Formal Response Required
October 5, 2006	Jon Nickel	Linda Jacobson	Former Acid Plant Sediment Drying Area Slurry Wall Work Plan and Construction Quality Control Plan	EPA Approval, October 13, 2006
October 18, 2006	Jon Nickel	Linda Jacobson	2006 Interim Measures Work Plan Addendum, Former Acid Plant Sediment Drying Area Slurry Wall, Monitoring, Operation, and Maintenance Work Plan	EPA Approval, October 23, 2006

Attached to This Progress Report	Jon Nickel	Linda Jacobson	Final Report of Results for East Helena Pump and Treat Pilot Test - November 7, 2006	No Formal Response Required
Attached to This Progress Report	Jon Nickel	Linda Jacobson	CAMU Phase 2 Cell Geotechnical Investigation	No Formal Response Required
Attached to This Monthly Progress Report	Jon Nickel	Linda Jacobson	October 2006 Post Remedial Investigation (RI)/Feasibility Study (FS), Long Term Monitoring Program (Monthly Residential Groundwater Wells)	No Formal Response Required
Attached to This Progress Report	Jon Nickel	Linda Jacobson	Raw Laboratory Analytical Report, September 2006 EH-100 Series Monitoring Wells	No Formal Response Required
Attached to This Progress Report	Jon Nickel	Linda Jacobson	Updated Arsenic Concentration Plume Maps	No Formal Response Required
Request for Replacement (Section C. of This Progress Report)	Jon Nickel	Linda Jacobson	Replace Monthly Pad Integrity Inspections with Interim Cap Inspections	Awaiting EPA Approval
Attached to This Progress Report	Jon Nickel	Linda Jacobson	Validation Summary, Asarco East Helena, Post RI/FS Long-Term Monitoring Project, Surface water, Groundwater, and CAMU Wells, Semi-Annual Sampling Event, Inorganic Analyses, June 2006 (Confirmation Sampling)	No Formal Response Required